;login:

The USENIX Association Newsletter

CONTENTS

The deadline for submissions for the January issue of *;login:* is December 16

NOTICE

;login: is the official newsletter of the USENIX Association, and is sent free of charge to Individual, Public and Institutional members of the Association.

The USENIX Association is an organization of AT&T licensees, sub-licensees, and other persons formed for the purpose of exchanging information and ideas about UNIX* and UNIX—like operating systems and the C programming language. It is a not-for-profit corporation incorporated under the laws of the State of Delaware. The officers of the Association are:

President	Lou Katz	Directors	Bruce S. Borden
Vice-President	John L. Donnelly		Alan G. Nemeth
Secretary	Lewis Law		Deborah K. Scherrer
Treasurer	Thomas Ferrin		Waldo M. Wedel

The editor of *;login:* is Tom Strong.

Member services are provided through the Association office. Membership information can be obtained from the office:

USENIX Association
P.O. Box 7
El Cerrito, CA 94530
(415) 528-UNIX

The office is staffed by Betty Madden (office manager) and Anita White.

Members of the UNIX community are heartily encouraged to contribute articles and suggestions for *;login:*. Your contributions may be sent to the editor electronically at

ucbvax!g:usenix

or through the U.S. mail to the Association office at the address above. The USENIX Association reserves the right to edit submitted material.

;login: is produced on UNIX using *troff* and a variation of the −me macros. We appreciate receiving your contributions in *n/troff* input format, using any macro package. If you contribute hardcopy articles please leave left and right margins of 1" and a top margin of 1½" and a bottom margin of 1¼". Hardcopy output from a line printer or most dot-matrix printers is not reproducible.

---

*UNIX is a trademark of Bell Laboratories.

4.2BSD — Berkeley Software Distribution for VAX — Now Available

Release 4.2 of the Second Distribution of Berkeley VAX Software for UNIX is now available from the Computer Systems Research Group of the University of California at Berkeley. It is a complete 32V-based UNIX system, including the kernel, all standard utilities, and additional Berkeley products. It features a refined version of the paging kernel for the VAX. It is available for holders of UNIX 32V, System III, or System V source licenses. The distribution fee is $750.

The major features of 4.2BSD are:

- Support for a large set of DEC and non-DEC hardware on the VAX.

- Full and transparent demand paging. As distributed it will support individual processes of up to six Megabytes each of data and stack area and six Megabytes of program, and these numbers can be increased.

- Improved system performance through reduced basic system overhead and improved disk throughput. The logical block size on disk has been increased and file system and user data is placed in rotationally optimal locations on disk.

- Full support for the DOD standard TCP/IP network communications protocol. Software support is also provided for ten different network hardware devices including three different 10Mb/s Ethernet modules.

- A new set of interprocess communication facilities that is integrated with the networking facilities.

- A new signal package that closely models the hardware interrupt facilities found on the VAX.

- Long file names (up to 255 characters) and symbolic links that may span file systems.

- Files with "shared" or "exclusive" locks.

- Group sets, rather than just a single group id, for access control based on groups.

- Disk quotas on a per-user, per-filesystem basis.

- An improved version of the Fortran 77 compiler and associated I/O library.

- A symbolic debugger *dbx* that replaces *sdb* and can be used with both C and Fortran.

- Interpreters for APL, LISP, ICON and both an interpreter and compiler for Pascal.

- The display editor *vi*, which runs on over 100 different intelligent and unintelligent terminals through use of a terminal capability description data base called *termcap*.

- The command processor *csh* (the C shell).

- Job control facilities that allow jobs to be moved between the foreground and background.

- A new line printer system that supports multiple line printers and spooling queues through a printer data base called *printcap*. Local and remote printers and raster output devices are also supported by the line printer system.

- Various other packages including programs to simulate a phototypesetter on 200bpi dot-matrix plotters, a bulletin board program, routines for data compression, improved *uucp*, and the −me macro package for *nroff* and *troff* [which is used, in modified form, to produce *;login:*].

4.2BSD can be booted on a VAX 11/730, 11/750, or 11/780 CPU with any of the following disks:

DEC MASSBUS	RM03, RM05, RM80, RP06, RP07
Emulex SC750/780 MASSBUS	Ampex 9300 & Capricorn
	CDC 9775, 9766 & 9730
	Fujitsu Eagle 404Mb
DEC UNIBUS	RK07, RA80, RA81, RA60
Emulex SC-21V UNIBUS*	Ampex 9300 & Capricorn
	CDC 9766

	Fujitsu 160Mb
DEC IDC	RA80, RL02

Bad block handling is supported on all DEC disk drives except the RL02, and on all disks attached to an Emulex UNIBUS or MASSBUS controller.

The tape drives supported by the distribution are:

DEC MASSBUS	TE16, TU45, TU77, TU78
DEC UNIBUS	TS11, TU80
Emulex TC-11 UNIBUS	Kennedy 9300, Cipher
TU45 UNIBUS	System Industries 9700

The basic distribution includes printed documentation, two 1600bpi 2400′ magnetic tapes, and console media for installing the system (a TU58 console cassette, and a RX01 console floppy disk). The printed documentation contains a complete manual set including both the Berkeley documentation and material that is unchanged from the original Western Electric 32V distribution. In addition, a high-quality typeset duplication master is provided for Volume 1 of the Programmer's manual and for the sections of Volume 2 that were added at Berkeley.

Bootstrapping the system requires a supported disk and tape drive. The distribution does not fit on several standard VAX configurations that contain only small disks. If you do not have at least 75 Megabytes of disk storage you can still install the distribution but you will probably have to operate without some or possible all of the sources on-line. No attempt has been made to install the system on the VAX 11/730 configuration that contains only dual RL02 disk drives, although the distribution tape may be bootstrapped on a RL11 controller and the system provides support for RL02 disk drives on either an IDC or a RL11. The support for RK07-only systems provided in 4.1BSD has been discontinued.

You can request an information packet by writing to the address given below. The packet contains the following documents:

- Berkeley Software for UNIX on the VAX (4 pages)
- Bug Fixes and Changes in 4.2BSD (19 pages)
- Changes to the Kernel in 4.2BSD (13 pages)
- Hints on Configuring VAX Systems for UNIX (21 pages)
- Performance Effects of Disk Subsystem Choices for VAX Systems Running 4.2BSD UNIX (14 pages)
- 4.2BSD System Manual (42 pages)
- Installing and Operating 4.2BSD on the VAX (54 pages)

It also contains a cover letter describing how to obtain the distribution, a checklist, and two copies of the licensing agreement.

The information packet should help you decide whether or not you would like to obtain 4.2BSD. It can be obtained by writing

> Pauline Schwartz, Distribution Coordinator
> Computer Systems Research Group
> Computer Science Division, EECS
> University of California
> Berkeley, CA 94720

Please do not call for the packet, or with technical questions before you have satisfied yourself that the information you need is not in the documents. They are very busy verifying licenses and catching up with the backlog of orders.

---

*Other UNIBUS controllers and drives may be easily usable, but will require minor modifications to the system to allow bootstrapping. The Emulex disk and SI tape controllers, and the drives shown here are known to work as bootstrap devices.

UniForum Trade Show and Technical Conference

The UniForum Trade Show and Technical Conference will be held January 17→20, 1984, at the Washington-Hilton Hotel in Washington, D. C. The USENIX track of the technical conference is being organized by Reidar Bornholdt of Columbia University. Information on the conference appears in following articles. The Software Tools Users Group will also hold a meeting at the conference, as described in a subsequent article.

A meeting announcement and call for papers has been mailed to all present and past USENIX members and meeting attendees. A meeting pre-registration packet was mailed in late November. Other information on UniForum may be obtained from:

> UniForum
> Suite 205
> 2400 East Devon Avenue
> Des Plaines, IL 60018
> 800-323-5155 (312-299-3131 in Illinois)

Call For Papers for the 1984 Winter UniForum Conference

The 1984 Winter meeting will be a combined USENIX−/usr/group conference. There will be two concurrent programs; one programmed by /usr/group, the other by USENIX. This is a call for papers for the USENIX program.

Papers should be technical in nature and of interest to the USENIX community. Talks presented at previous meetings will not be accepted. Suggested topic areas include but are by no means limited to:

Systems — kernel enhancements, ports to new machines, networks, optimizations, performance issues, real time mods, etc.

Programming tools and environments — editors, utilities, new languages and reports on developments in established languages, etc.

Applications — database systems, graphics, mail systems, real time projects, etc.

UNIX issues — trends and/or directions in the UNIX world, standards, security, etc.

Authors must submit an abstract of at least 250 words immediately. Papers will be chosen from these abstracts. Abstracts must include the following:

> Title
> Name of Author
> Institution or Company
> Mailing address (U.S. Mail and network)
> Phone number
> Audio-visual requirements

Abstracts should be submitted to the USENIX program chair, preferably by electronic mail:

> Reidar Bornholdt
> Room 9-451 P&S
> 630 West 168 Street
> New York, NY 10032
> [ucbvax!decvax!]harpo!cucard!reidar

Tentative Agenda for UniForum

Tutorials

All tutorials will be held from 8:30am→5pm on Tuesday, January 17.

1. Software Contracts and Licenses
    Susan H. Nycum of Gaston Snow & Ely Bartlett; Palo Alto, CA

2. C Style and Portability
    Eric Allman of Britton-Lee; Los Gatos, CA

3. UNIX Systems Administration
    Ed Gould and Bob Kridle of Mt. Xinu; Berkeley, CA

4. Advanced Shell Programming
    Steve Bourne of Silicon Graphics, Inc.; Mountain View, CA

5. Vi Editor
    Presented by Auxco

6. UNIX Systems on Local Area Networks
    Several speakers active with local area networks on UNIX

Tentative Schedule of Conference Sessions

	/usr/group Sessions	USENIX Sessions
Wednesday, January 18		
9:00→10:00	Keynote Address	
	Speaker: Jack M. Scanlon, Western Electric	
10:30→12:00	Joint Session	
1:30→ 3:00	UNIX in Government	Networking
		Chair: Thomas Ferrin, U.C.S.F.
3:30→ 5:00	Market Research & UNIX	Distributed Processing Under UNIX
		Chair: Alan Nemeth, Prime Computer
Thursday, January 19		
8:30→10:00	Micro to Mainframe Communications	Compilers & Languages
		Chair: Lou Salkind, New York Univ.
10:30→12:00	Graphic Work Stations & Applications	UNIX Directions
		Chair: Brian Redman, B.T.L.
1:30→ 3:00	UNIX to Micro Ports	Novel Applications
		Chair: Reidar Bornholdt, Columbia Univ.
3:30→ 5:00	New Developments in Office Automation	Implementations
		Chair: Joseph Yao, Hadron, Inc.
Friday, January 20		
8:30→10:00	Case Studies in Office Automation	Database Systems
		Chair: Douglas Kalish, Logical Software
10:00→12:00	UNIX Standards	Open Session
		Chair: Reidar Bornholdt, Columbia Univ.
1:30→ 3:00	Computer Graphics Systems & Applications	
	Chair: Noel Kropf, Columbia Univ.	
3:30→ 5:00	Joint Session	

Software Tools Users Group Meeting Call for Papers

When and Where?

Tuesday, January 17, 1984, from 7→11pm
The Washington Hilton Hotel
Washington, D.C.

The Software Tools Users Group meeting will again be held in conjunction with the USENIX Association and /usr/group meetings, January 17→20, 1984. Individuals interested in making presentations in the Software Tools Technical Sessions are invited to submit abstracts by December 20, 1983, to the address below.

Suggested Presentation Topics:

- Applications using the VOS
  Programming Environments
  Software Development Tools

- New and Enhanced Utilities
  Graphics Tools
  Networking Tools
  Text Processing Tools
  Systems Tools

- Software Standardization and Portability

- Future Directions

Abstracts

Abstracts must be submitted by December 20, 1983. The abstract should explain what the work is about and should not exceed 1000 words. Abstracts must contain the following informations:

Title
Name of Author
Institution or Company Name
Mailing Address
Phone Number (and Network Address, if available)
Audio-visual Requirements

Abstracts should be mailed to:

Software Tools Users Group
Attn: Conference Coordinator
1259 El Camino Real #242
Menlo Park, CA 94025

Proceedings

The conference committee intends to produce a proceedings consisting of copies of short papers by the authors on the subject of their presentation, as well as all abstracts. All of the groups will be represented in these proceedings: Software Tools, USENIX, and /usr/group. Submission of a paper is not required, although it is strongly encouraged. Papers will be collected at the conference.

Summer 1984 USENIX Conference at Salt Lake City

The Summer 1984 USENIX Association conference will be held June 12→15 in Salt Lake City and hosted by the University of Utah. Technical sessions will be held at the Hotel Utah with a vendor exhibition to be held in the nearby Salt Palace. The social highlight of the conference will be a barbeque held in the surrounding Wasatch Mountains on Thursday evening. Special hotel arrangements can also be made for those wishing to arrive early/stay late in order to avail themselves of Utah's variety of outdoor summer activities including hiking, backpacking, river running, and, with any luck, summer skiing!

Randy Frank of the University of Utah is the local conference chairman. Program co-chairmen are Jay Lepreau and Spencer Thomas, also of the University of Utah. **The technical program deadlines will be tighter than usual because of plans to produce a proceedings which will be available at the conference.** Prospective speakers should plan on having camera ready copy of their talks in at least two weeks prior to the conference. A "Call for Papers" for the Salt Lake City conference will be distributed at the Washington UniForum meeting and mailed out at the same time.

As announced in the last issue of *;login:* there will be a *GO* contest at this meeting. Additional information on the meeting and a reprint of the *GO* contest rules will be provided in upcoming issues of *;login:* .

USENIX Conference Proceedings

Copies of the proceedings of the San Diego UNICOM conference are still available from the Software Tools Users Group. They are over 350 pages long and include all papers presented by the speakers as well as reports on many of the presentations.

The price is $25 per copy, plus $10 per copy for overseas postage. Send your check or money order made out to "Software Tools Users Group" to:

STUG
1259 El Camino Real, #242
Menlo Park, CA 94025

The publication of the proceedings of the Toronto Conference was delayed due to various problems. They have now been printed and mailed to those who ordered them.

There are copies of the Toronto Proceedings available for purchase from the USENIX office. The price is $30 per copy, plus $5 per copy for overseas postage. Payment **must** accompany your order.

Australian UNIX Users Group Meeting Announcement

The summer meeting of the Australian UNIX Users Group (AUUG) will be held on February 20 and 21, 1984, on the campus of Sidney University. The first day will be devoted to general interest non-technical papers on UNIX, oriented to those running UNIX or interested in buying a UNIX system. On the second day there will be technical presentations on UNIX applications and system developments. If there is enough interest, tutorials for those with little or no UNIX experience will be presented in conjunction with the meeting.

All major manufacturers of UNIX-based systems will be represented, providing an opportunity for current and prospective users to evaluate equipment.

For further information, registration forms, or to express interest in tutorials, please contact:

Chris Campbell
Digital Electronics Pty. Ltd.
P.O. Box 324
Pymble, N.S.W. 2073 Australia
(02) 449-4400
Sidney University Network address: de:basservax

Call for Papers for the AUUG Meeting

The meeting will feature a conference and an exhibition devoted to topics of interest to the UNIX community. Presentations are invited on all areas of the UNIX system.

UNIX Applications
> graphics, database systems, office automation, word processing, and other applications.

UNIX Systems
> This area includes the implementation of network and distributed systems for porting of UNIX to new computer systems and systems management and performance.

UNIX Programming Tools
> This area includes utility programs, programming environments, and new programming languages and implementation.

The UNIX World
> This area includes standards, analysis of commercial trends, and other related topics.

Talks describing new products are encouraged, Authors must describe new and interesting work. Selection of items will be based on the submission of abstracts. Abstracts must contain sufficient detail to allow the program committee to determine the suitability of a presentation, but should not exceed 1,000 words.

Abstracts must be submitted to the program chair, preferably by electronic mail, by Monday, January 2, 1984:

Piers Lauder
Basser Department of Computer Science
Sidney University
Sidney, N.S.W. 2006 Australia
(02) 692-2824
S.U.N address: piers:basservax

The program committee also intends to schedule other kinds of presentations including panel discussions and invited speakers. Suggestions are welcome from both the academic and commercial communities. Suggestions to the committee should be submitted as soon as possible.

Japan UNIX Users Group Formed

The Japan UNIX Society (JUS) has been formed to support the exchange of technical information among UNIX users in Japan. It plans to hold technical meetings once a month, symposium twice a year, and to publish a newsletter twice a year. JUS may be reached at:

Japanese UNIX Society
c/o Japan Software Development
2-8-10 Toranomon
Minato-ku, Toyko Japan
03-503-4981

Letters to the Editor

To the editor, *;login:*

The latest *;login:* newsletter [volume 8, number 4] contained a scribe's report by Andy Tannenbaum on the presentation at the USENIX Toronto Conference entitled "UNIX System V and 4.1C BSD" by John Chambers and John Quarterman. Certain statements made in the report require clarification.

To quote the first paragraph of Tannenbaum's report:

Comparisons were done running on a VAX 780 and a 750. 4.1C seems to be 25% faster than System V at typical disk file I/O, though Berkeley has been forecasting factor of 5 or so speedups for heavily disk I/O bound tasks in 4.2. Benchmarks showed that 4.1C was generally a bit faster.

The abstract of the paper in the USENIX Summer 83 Toronto Conference Technical Program mentions a VAX-11/750, as we originally planned to use one. That machine was not available in time, however, and there is no mention whatever of it in the submitted paper; rather it is stated:

9.2 Tentative Benchmarks

These measurements were taken on a VAX-11/780 with six megabytes of memory and a single RP07 disk.

Some qualifications in the written paper regarding the 25% figure were omitted from the spoken presentation due to time constraints and bear repeating here:

We interpret these results to mean that 4.1C is noticeably faster than System V. We do not state the obvious figure of 25%, because the results could easily be varied by, for instance, increasing the amount of file I/O a job uses (to take advantage of the faster 4.1C file system), or by using larger processes (to force System V to swap, which it never did with the above job).

Tuning either kernel could, of course, vary the results either way.

Definitive benchmarks will have to await the release of 4.2BSD.

There is nothing in the paper to contradict Berkeley's findings on the speed of the 4.1C/4.2BSD filesystem, and we found no such evidence.

John Chambers
Office of Academic Computing
  & Biostatistics
University of Texas Medical Branch
Galveston, Texas 77550
ihnp4!ut-sally!jbc
jbc@ut-sally.ARPA

John Quarterman
Department of Computer Sciences
Painter Hall 3.28
University of Texas at Austin
Austin, Texas 78712
ihnp4!ut-sally!jsq
jsq@ut-sally.ARPA

[Mr. Tannenbaum prepared his report from notes taken at the presentation and from the abstract. He did not have access to a copy of the paper when he prepared his report....Ed.]

To the editor, *;login:*

To answer a frequently asked question: The paper "UNIX System V and 4.1C BSD" by John Chambers and John Quarterman is marked

© Copyright 1983 by the Regents of the University of Texas.

solely in order to prevent its sale by anyone other than the USENIX Association. The paper may be distributed free of cost in any quantity by any means and by any entity so long as the whole paper, in one of forms originally distributed by John Chambers and John Quarterman, including the copyright notice, is distributed. Properly attributed quotations in reviews and other papers are of course also permitted.

The paper is available in the Proceedings of the Summer 1983 USENIX Toronto Conference, by anonymous FTP as *compare.doc* from ut-sally.ARPA, by *uucp* from ut-sally and several other *uucp* sites, and by US mail from the authors so long as the requests are not excessive.

John Chambers   John Quarterman

To the editor, *;login:*

In the list of attendees for the Toronto Conference the affiliations for the undersigned are incorrectly given as "University of Winnipeg." The correct affiliation is "University of Manitoba." The telephone numbers given are correct.

Doug Kimelman   Peter R. King
University of Manitoba   University of Manitoba
Computer Science Dept.   Computer Science Dept.
Winnipeg, Man. Canada R3T 2N2   Winnipeg, Man. Canada R3T 2N2

USENIX Association 1983 Software Distribution Tapes

Correction

In the previous issue of *;login:* two contributions to the 83.1 USENIX Distribution tape were incorrectly attributed to Yorum Shoham of Geotronics Corp. In fact the line printer spooler was written by Douglas Gwyn and the argument line cracker was written by John Quarterman. The work was done when they were employed by Geotronics Corp. Mr. Gwyn is now employed at the U.S. Army Ballistic Research Laboratory and Mr. Quarterman is now employed by the Department of Computer Sciences at the University of Texas at Austin.

Our apologies for the error.

USENIX 83.2 Tape

The USENIX Association will be able to produce two distribution tapes for 1983. The first has already been distributed. The second is being prepared by the new Tape Editor, Peter Gross of the High Altitude Observatory at NCAR, and will be distributed in December. The 1983 tape release form signed by members who received the first tape is also applicable to this second one. Institutional members who have not returned their 1983 tape release forms and/or have not sent the copy of their license should do so before the end of the year in order to receive both their tapes.

The second tape will contain contributions from the following organizations.

Wisconsin State Laboratory of Hygiene
1. kernel modifications for higher performance raw mode tty input
2. RJE system for UNIX to Univac 1100
3. enhanced spooling system
4. vir: input record entry/retrieval system
5. local mods to many standard UNIX commands
All this code was written on a PWB+ system (with V6 file system)

Perkin Elmer
UTMOST menu-driven office system

Daniel Strick
Zork game (binary for VAX 4.1BSD)

Stanford University Solar Physics Group
An argument handling and data handling package, especially well-suited for scientific applications that require data input specifications on the command line. The package was developed on a Berkeley 4.1BSD system, but most of the code does not contain licensed material.

More detailed information, including specific licensing restrictions, will be included in the next issue of *;login:*.

USENIX Office Changes

Effective November 1, 1983, under a renewed contract negotiated with Penny Penny & Strong, Mrs. Betty Madden has been appointed office manager of the USENIX Association office. She is assisted by Anita White. The office will continue at its present location. Tom Strong is continuing as editor of *;login:*.

1984 Membership Renewal

Mailing of 1984 membership renewal forms has been delayed until the proposed new bylaws have been either accepted or rejected by the voting membership. This is necessary because of potential changes in various membership categories. Renewal forms will be sent to all current members as soon as possible.

USENIX Treasurer's Report

Fiscal Year 1982

The following report prepared for USENIX by the accounting firm of Breiner & Bodian represents income and expenses between 1 December 1981 and 30 November 1982. Items worth noting are:

- Both our Santa Monica and Boston conferences were outstanding financial successes as well as technical successes.

- USENIX moved its offices from Rockefeller University in New York to El Cerrito, California during Summer 1982. In September 1982 the USENIX Board contracted with the partnership of Penny, Penny & Strong (PP&S) to provide management and support for the new office. Office management and related expenses represent a new expense item.

- As always, the newsletter production and mailing continues to be a major expense. In the fiscal year 1982, six issues of *;login:* were produced.

- Travel continues to be a major expense. The USENIX Board meets regularly four times a year.

- USENIX Association is a non-stock, non-profit Delaware corporation, but currently does not have tax exempt status with the Internal Revenue Service. Progress is now underway to obtain tax exempt status.

In summary, the major income items were dues which provided 44% of the income and the two conferences which provided 56% of the income. The major expense items were *;login:* (computer services, newsletter production, stationary, printing and postage) which took 35% of the expenses, and running of the USENIX office (office management fees, personnel expense, rent, office supplies) which took 31% of the expenses.

I apologize for the tardiness of this report. Moving of the office and dealing with an accounting firm 3,000 miles away proved to be a substantial handicap. If there are additional activities or services which you feel USENIX could provide, please do not hesitate to let us know.

Thomas E. Ferrin, Treasurer

Accountants' Report

INDEX

BREINER & BODIAN
CERTIFIED PUBLIC ACCOUNTANTS
425 BROADHOLLOW ROAD
MELVILLE, NEW YORK 11746
(516) 249-3900
(212) 895-5000   August 15, 1983

Usenix Association
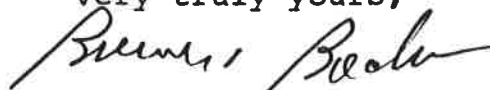P. O. Box 7
El Cerrito, California, 94530

Gentlemen:

We have reviewed the accompanying balance sheet of Usenix Association as of November 30, 1982 and 1981, and the related statements of income, fund balance and changes in financial position for the years then ended, in accordance with standards established by the American Institute of Certified Public Accountants. All information included in these financial statements is the representation of the management of Usenix Association.

A review consists principally of inquiries of company personnel and analytical procedures applied to financial data. It is substantially less in scope than an examination in accordance with generally accepted auditing standards, the object of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

Based on our review, we are not aware of any material modifications that should be made to the accompanying financial statements in order for them to be in conformity with generally accepted accounting principles.

Very truly yours,

Certified Public Accountants

BREINER & BODIAN

BALANCE SHEET

	November 30,	
	1982	1981
ASSETS		
Current Assets:		
Cash in Bank	$ 41,484	$ 7,690
Investments	34,766	35,195
Prepaid Convention Expenses	10,000	10,500
Prepaid Office Expenses	4,475	–
Deferred Charges	–	3,000
Other Receivables	4,409	–
	$ 95,134	$ 56,385
LIABILITIES AND FUND BALANCE		
Current Liabilities:		
Accrued Expenses	$ –	$ 11,091
Deferred Income	4,845	5,536
Taxes Payable	17,494	10,787
	22,339	27,414
Fund Balance:		
Fund Balance - Beginning	28,971	6,298
Net Income	43,824	22,673
Fund Balance - Ending	72,795	28,971
	$ 95,134	$ 56,385

"See Accountants' Review Report"

BREINER & BODIAN <u>USENIX ASSOCIATION</u> Page 3

<u>INCOME STATEMENT</u>

	Year Ended November 30,	
	<u>1982</u>	<u>1981</u>
<u>Income:</u>		
Dues Revenue	$ 58,834	$ 64,943
Sales-Software	–	432
Convention Revenue (Note 1)	74,097	16,970
	$ 132,931	$ 82,345
<u>Expenses:</u>		
Computer Services	$ 10,841	$ 5,495
Newsletter Production	9,100	9,998
Stationery, Printing & Postage	5,472	3,371
Office Supplies & Expenses	1,892	1,553
Office Management Fees	6,900	–
Conferences & Conventions	3,500	4,893
Professional Fees	1,687	–
Travel & Subsistence	15,249	10,660
Personnel Expense	10,340	14,551
Insurance	2,559	–
Software Expense	–	3,782
Rent	2,874	–
Telephone	842	–
Bank Charges	570	7
Miscellaneous	80	–
	71,906	54,310
<u>Operating Income</u>	61,025	28,035
<u>Other Income:</u>		
Dividends	4,609	5,435
<u>Income Before Income Taxes</u>	65,634	33,470
<u>Income Taxes:</u>		
Federal Income Tax	9,912	4,731
N. Y. State Franchise Tax	5,972	3,045
N. Y. City General Corporation Tax	5,906	3,011
Delaware Franchise Tax	20	10
	21,810	10,797
<u>Net Income</u>	$ 43,824	$ 22,673

"See Accountants' Review Report"

BREINER & BODIAN

USENIX ASSOCIATION

STATEMENT OF CHANGES IN FINANCIAL POSITION

	Year Ended November 30,	
	1982	1981
Sources of Working Capital:		
Working Capital Provided by Operations	$ 43,824	$ 22,673
Increase in Working Capital	$ 43,824	$ 22,673

Changes in the Components of Working Capital:

Current Assets:

Cash in Bank	$ 33,794	$ 6,574
Investments	(429)	14,240
Prepaid Convention Expenses	(500)	10,500
Prepaid Office Expenses	4,475	–
Deferred Charges	(3,000)	3,000
Other Receivables	4,409	–
Increase in Current Assets	38,749	34,314

Current Liabilities:

Accrued Expenses	(11,091)	915
Deferred Income	(691)	1,494
Income Taxes Payable	6,707	9,232
Increase (Decrease) in Current Liabilities	(5,075)	11,641
Increase in Working Capital	$ 43,824	$ 22,673

"See Accountants' Review Report"

BREINER & BODIAN

USENIX ASSOCIATION

NOTE TO FINANCIAL STATEMENTS

Note 1:

The records maintained for the conventions and conferences held by Usenix Association have not been reviewed by us.

Usenix Association advances the convention attendance fees remitted by its members to the convention chairman who pays for hotels, speakers, updating literature and other related expenses. The balance of attendance fees collected over expenses incurred is presented on the income statement as convention Revenue.

"See Accountants' Review Report"

Proposed Revision of Bylaws and New Membership Categories

When the USENIX Association was formed in 1979, its primary role was to create a forum for exchange of information among UNIX system developers and maintainers. At that time, UNIX was primarily confined to universities, limited to only a few machines, and without a source for information or support. The past few years have brought a radical change. UNIX has become a major entity in the computer world, with its availability on a wide variety of hardware, the emergence of large numbers of binary licensees, the introduction of supported UNIX systems by vendors, and the arrival of very large numbers of UNIX users as a result. The USENIX Association has had to grow and adapt rapidly to this changing environment. Our technical conferences have become our major activity, providing an information exchange for thousands of UNIX developers, maintainers, and users, and covering a much broader range of issues than was originally required.

Because of this significant change in the environment, the USENIX Board of Directors has undertaken a re-evaluation of the existing bylaws, and especially the membership categories, in the hopes of bringing them more into line with the needs and interests of the current Association. In addition, the bylaws were originally put together somewhat hastily from a boilerplate version intended for business corporations plus bits and pieces of the bylaws from various user groups. In the years since their creation, procedural portions have been found to be clumsy, unclear, incomplete, or inappropriate. The Board has attempted to locate and correct all such trouble spots.

The most significant change in the new bylaws is a restructuring of the membership classes, primarily in an attempt to allow all members representation in the voting process. The original bylaws created an organization of *installations* licensed or sublicensed by AT&T. Individuals could belong to the Association and receive the newsletter, but could not vote. This restriction of voting power to a single Installation Representative was designed to protect the legal interests of the installations, simplify the workings of the Association, and guarantee that no single institution could dominate the group. At its inception this organization was reasonable. There was only one type of UNIX license — source (no versions) — and most of the members were universities actively involved in kernel modifications and the like. However, we now see a myriad of licenses, both binary and source, and a broad range of installations involved in the group. The existing structure creates the somewhat unbalanced situation where a binary licensee may be a voting member, as well as a large institution which must act and vote as a whole. But the majority of individuals actively involved with UNIX development and with the activities of the Association are not directly represented.

The new bylaws attempt to adjust the membership structure to more accurately reflect changes in the UNIX community. License requirements have been removed from membership categories and all members (except Student) will have the right to vote. Licenses will still be required for certain activities but license verification will become a service provided rather than a membership requirement.

The old membership categories are:

Type	License Requirements	Voting
Voting Institutional Member	Source or binary license	Yes
Non-voting Institutional Member	(Bell System installations)	No
Individual Member	Covered by license	No
Public Member	No license	No

The proposed membership categories are:

Type	License Requirements	Voting
Supporting Member	No license required	Yes
Institutional Member	No license required	Yes
Individual Member	No license required	Yes
Student	No license required	No

The new categories are differentiated primarily by the fees paid and the services received and all categories (except Student) are open to any individual who, or organization which has a *bona fide*

interest in the Association. Neither the old nor the new bylaws make any explicit statement of services granted any category, but the services (and fees paid) are expected to remain roughly as they are now: all members will receive the newsletter and discount registration at the meetings; license verification will become a (new) service granted to the Institutional (open to individuals too) or Supporting Member categories and will allow them to take advantage of services requiring a license, such as receiving software distribution tapes containing material subject to non-disclosure license restrictions or sending representatives to tutorials where these restrictions apply.

The reason license verification will be available only to the higher fee membership categories is that it is a costly process for the Association. It also enables us to provide services of more value to those who may want them (typically installations) and who wish to make a corresponding greater financial contribution to the Association. Procedures for license verification have been worked out in great detail with AT&T. Not only does the Association require a copy of the signed license agreement from the member, but the license must also be verified directly with AT&T, often multiple times a year. In the case of allowing access to licensed tutorials and workshops, names of individuals covered by Institutional licenses also have to be obtained and verified.

The new membership categories are similar to those found in other professional organizations, and the Board of Directors feels they more accurately represent the needs of the group. The interests of licensed organizations are still protected by the license verification procedure, and we will now satisfy the need for voting representation of all members.

Other changes to the bylaws are primarily procedural or rewrites for clarification, generalization, or greater efficiency.

The proposed bylaws have been extensively prepared and revised by the Board of Directors and approved unanimously for submission to the membership. Included in this issue is a copy of the proposed revision of the bylaws, along with a synopsis of the changes. All voting members have already received copies of the synopsis, old, and new bylaws. A mail vote will be taken in December and, if the new bylaws are accepted, the new membership categories will take effect on January 1, 1984.

If you have any questions or comments concerning the proposed bylaws, please do not hesitate to contact me or one of the other Board members. We are all very interested in providing the type of organization you, the members, want and we hope these new bylaws will be a major step in that direction.

Deborah K. Scherrer, Director

Synopsis of Changes

ARTICLE 1 — ACTIVITIES

The statement of purpose was removed from the Bylaws, at the request of the lawyers, because any legally-binding statement of purpose occurs in the Articles of Incorporation, not the Bylaws document. The statement of purpose given in the old Bylaws does already appear in our Articles of Incorporation.

The old Bylaws specified and thus potentially limited the Association to only three activities: meetings, newsletter and publications, and tapes. The new Bylaws expand these categories to include license verification and any other activities which would benefit the members.

ARTICLE 2 — DEFINED TERMS

The new version adjusts the terms to reflect the change in membership categories.

ARTICLE 3 — MEMBERSHIP

The old Bylaws specified four categories of membership:

Type	Voting	License Requirements
Voting Institutional Member	Yes	Source or binary
Non-voting Institutional Member	No	(Bell System)
Individual Member	No	Covered by license
Public Member	No	No license

Voting Institutional Members were holders of at least one license or sublicense from AT&T. Holders of licenses were eligible for one membership for each CPU, although there was no requirement that more than one membership be held and, in fact, institutions seldom requested more than one membership. Non-voting Institutional Members were any Bell System installation. Individual Members had to be affiliated with an Institutional Member and be bound by their license requirements. Public Members need only have a *bona fide* interest in the Association.

The proposed membership categories are:

Type	Voting	License Requirements
Supporting Member	Yes	None required
Institutional Member	Yes	None required
Individual Member	Yes	None required
Student Member	No	None required

Student membership will be open to any full-time student. In spite of the naming conventions, the other three categories will be open to either individuals who, or organizations which have a *bona fide* interest in the activities of the Association. There is no specific license requirement for membership and membership categories will essentially be differentiated by the fee paid and the services granted. Neither the old nor the new Bylaws make any explicit statement of services granted any category, but the services are expected to remain primarily as they are now: all members will receive the newsletter and membership discount at meetings; license verification will become a service granted to Institutional and Supporting Members and will allow them to take advantage of services requiring a license, such as the distribution tape. The Supporting Member category was created to allow installations (or individuals) to support the Association financially to a greater degree than that required for Institutional Membership. There may be additional services granted this category, to reflect their greater support.

Thus, the change in membership structure primarily allows all members (except Student) to vote and removes the explicit requirement of AT&T licensing for membership.

The reference to membership lists in the old Bylaws (Section 3.4.2) was removed as being inappropriate for a bylaws document. Issues like this have generally been decided by Board action.

Section 3.5, Grounds for Loss of Membership, was generalized and made more appropriate for the new membership categories.

The old Bylaws required that membership dues be set and payable annually on a specific date. The new Bylaws generalize the procedure to allow for dues collection on other schedules determined by the Board, such as a date based on the date of membership approval.

ARTICLE 4 — DIRECTORS

In the new Bylaws, the election and taking office of new Directors is linked to an Annual Meeting, rather than one of two presumed General Meetings. (See Article 9 for a more complete discussion of this change.) In addition, the wording of the procedures for removing a Director from office was clarified since its meaning was ambiguous in the old Bylaws.

The mention of an explicit number of Board of Director meetings per year (Section 4.5) was dropped to allow for more flexibility.

The explicit requirement that the Board set conference registration fees was removed as being inappropriate to a bylaws document.

In Section 4.6, Notice of Meetings, and Section 4.7, Waiver of Notice, the allowance of notice by electronic means was removed because it conflicted with Delaware corporate law. All notices must therefore be in writing. The procedures for calling meetings were also clarified and made more workable.

Article XII of the old Bylaws, which related to consent in lieu of a meeting, was moved to become Section 4.8 of the new Bylaws, where it seemed more appropriate.

In Section 4.12, Submission of Matter to Mail Vote of the Members, the majority required for approval of an issue was raised from 1/4 to 1/3. In addition, procedures for submitting matters to a mail vote were clarified and made less ambiguous.

ARTICLE 5 — OFFICERS

The beginning of an officer's term is readjusted to begin at the Annual Meeting, rather than one of the General Meetings as referenced in the old Bylaws. (See the discussion on Section 9.)

The procedures for removal of officers (Section 5.3) were slightly clarified.

In Section 5.4, Resignations, the resignation of an officer was adjusted to explicitly include resignation from the Board of Directors.

ARTICLE 6 — COMMITTEES

To bring the procedures into accordance with Delaware corporate law, the new Bylaws explicitly require that committees be established by a majority vote.

ARTICLES 7, 8, and 9 — ELECTIONS, ANNUAL MEETINGS, and VOTING

The old Bylaws assumed the organization would be having two "General" meetings a year, spaced roughly 6 months apart. This old wording reflected the normal workings of a business corporation rather than our technical conferences. Election procedures were based on this assumption and required a nominating committee be announced at one meeting, candidates at the next, the election take place (in an unspecified time frame), and the new Board take office at the next meeting after that. With the advent of jointly-sponsored meetings there is no guarantee that meetings would be spaced appropriately for this procedure. Nor could the group decide to hold more than two (or less than two) meetings per year. Thus the concept of a single "Annual" business meeting was developed and the election procedures spelled out in detail in relation to that meeting. The Annual meeting, not to be confused with a conference, is primarily designed for a change-over in Board members and other related business, and will be scheduled to coincide with a general conference whenever reasonable. In addition, the old Bylaws were vague about procedures for nomination and election. The new Bylaws explicitly state procedures for both.

Scattered throughout the old Bylaws were several different voting procedures, dependent upon the type of issue being decided. In addition, much of the phrasing was oriented toward votes being taken at meetings, rather than by mail ballot. The new Bylaws coalesce all voting procedures into Article 9, where the procedures are standardized and clarified and explicitly geared toward balloting by mail. Mention is also made of the need for procedures to verify ballots.

ARTICLE 10 (new)/VIII (old) — CONTRACTS, etc.

The new Bylaws require that any officer or agent entering into a contract must have explicit authorization from the Board of Directors if the contract exceeds a certain dollar limit. The previous Bylaws had no limit. Also, the new Bylaws state that any checks issued on behalf of the organization must have two signatures only if they exceed a certain dollar limit. The old Bylaws required all checks, no matter how small, to be signed by two Directors, causing significant delays in processing.

ARTICLE 11 (new)/IX (old) — BOOKS AND RECORDS

The new Bylaws explicitly require the Treasurer to keep the Board informed as to the whereabouts of the books and records.

ARTICLE 13 (new)/XI (old) — AMENDMENTS OF BYLAWS
Section 13.1 (11.1 old) was clarified to explicitly apply to mail balloting.

ARTICLE 14 (new) — COMPENSATION
This article explicitly forbids any member, director, or individual from sharing in the income of the organization, other than being reimbursed for services rendered. It did not appear in the original Bylaws although it is stated in the Articles of Incorporation. It is included in the new Bylaws to make explicit our commitment to operate as a non-profit, professional technical society.

Proposed USENIX Association Bylaws

USENIX ASSOCIATION
(A Delaware Non-Stock Corporation)
By-Laws

ARTICLE 1 — ACTIVITIES

1.1. Activities

To achieve its purposes, the Corporation may:

1.1.1. Meetings

Conduct general meetings, discussion groups, forums, panels, lectures and other similar programs concerned with the development, exchange and communication of research and technological information and ideas pertaining to UNIX[1] and UNIX-related computer systems.

1.1.2. Publications

Publish through its Newsletter and other publications the results of its members investigations and other information relevant to the purposes of the Corporation.

1.1.3. Software Distribution

Collect software and distribute said software to its members for use on their systems.

1.1.4. License Verification

Verify licenses of members for the purpose of administering the services of the Corporation.

1.1.5. Other Activities

Establish and promote other activities consistent with its purpose for the benefit of its members.

---

[1]UNIX is a Trademark of Bell Laboratories.

ARTICLE 2 — DEFINITIONS

2.1. Defined Terms

As used herein, the following terms shall have the meanings set forth below:

2.1.1. The Corporation

USENIX ASSOCIATION, a Delaware non-profit, non-stock corporation.

2.1.2. Member's Representative

The employee or principal of a Member designated to serve as that Member's official spokesman at any function of the Corporation and to cast that Member's vote on all matters as to which the Member may have the right to vote.

2.1.3. Voting Member

Any Member who has been granted voting rights by Section 3.8.

ARTICLE 3 — MEMBERSHIP

3.1. Classes of Membership

Four classes of membership are provided. Benefits and qualifications for each class shall be determined by the Board of Directors.

3.1.1. Student Member

Any full time student is eligible to become a Student Member.

3.1.2. Individual Member

Any person who or organization which has a bona fide interest in the purposes of the Corporation is eligible to become an Individual Member.

3.1.3. Institutional Member

Any person who or organization which has a bona fide interest in the purposes of the Corporation is eligible to become an Institutional Member.

3.1.4. Supporting Member

Any person who or organization which has a bona fide interest in the purposes of the Corporation is eligible to become a Supporting Member.

3.2. Application for Membership

An Organization or person desiring to become a Member shall submit a written membership application to the Corporation, addressed to the Secretary or his designated assistant. The completed application shall provide such information as shall from time to time be prescribed by the Board of Directors.

3.3. Qualification as Member

The Board of Directors shall establish procedures for review of each membership application. The applicant shall be notified of approval or rejection within thirty days after receipt of application.

3.4. Obligations of all Members

Each Member shall abide by the By-Laws and the rules and regulations of the Corporation as they may from time to time appear. All Members shall respect licensing obligations.

3.5. Grounds for Loss of Membership

A Member shall lose his membership within thirty days after receiving written notice from the Secretary that the Board shall have determined that the Member has failed to abide by the By-Laws or rules and regulations of the Corporation (such notice to state the basis for revocation of membership).

3.6. Appeal

Within ninety days of the receipt of notice sent pursuant to section 3.5, the recipient Member may appeal in writing (addressed to the President) to the Board of Directors to have the notice set aside. The only bases upon which such appeal may be made shall be:

3.6.1. Invalid Grounds

Proof satisfactory to the Board that the ground(s) set forth in the notice is (are) not valid, or

3.6.2. Extenuating Circumstances

A reasonably detailed statement of extenuating circumstances. The Board of Directors shall act upon an appeal within ninety days of its receipt and shall notify the appellant in writing of its decision within thirty days thereafter.

3.7. Withdrawal

A member may voluntarily withdraw from the Corporation at any time by giving written notification to the Secretary signed by the Member or Member's Representative of the desire to so withdraw. Such withdrawal shall become effective upon receipt thereof by the Secretary.

3.8. Rights of Members

The right to vote for the election of members of the Board of Directors and officers and to vote on all issues is conferred solely upon Individual, Institutional and Supporting Members. Only a Voting Member or Member's Representative shall be eligible to be a member of the Board of Directors or to hold elective office in the Corporation.

3.9. Membership Dues

The amount of dues to be paid by members of the Corporation shall be set by the Board of Directors. Dues shall be due and payable on a schedule set by the Board.

ARTICLE 4 — DIRECTORS

4.1. Powers

All corporate powers shall be exercised by the Board of Directors, except as otherwise expressly provided by law or by the Certificate of Incorporation or by these By-Laws, but the directors shall act only as a Board and the individual directors shall have no power as such. Among such powers are:

4.1.1. Corporate Policy

The Board of Directors shall develop, determine and prosecute corporate policy.

4.1.2. Decisions of Members

The Board of Directors shall interpret and implement the decisions of the Members.

4.1.3. Budget

The Board of Directors shall approve the Corporation's annual budget and engage an accounting firm to examine the Corporation's financial records and to prepare all necessary tax returns and information statements.

4.1.4. Vacancies

The Board of Directors shall fill all vacancies in any office or on the Board of Directors for the unexpired term of the previous holder of such office or seat on the Board of Directors, provided that any officer or director so elected shall be subject to removal by the Members and the Board of Directors shall not have any power to reelect any officer or director who may have been removed by the Members. If there is a vacancy in the office of the President, the Vice President shall assume that office and the Board of Directors shall fill the thus vacated office of Vice President.

4.2. Number, Term of Office and Qualification

The number of directors of the Corporation shall be eight. The Corporation's President, Vice President, Secretary and Treasurer shall automatically become directors when elected to their office. In addition to the aforementioned officers, the Board of Directors shall have four other directors. Any eligible person may be reelected as a director one or more times. The term of office of each director shall begin at the Annual Meeting following his election and end at the Annual Meeting of the next even numbered year. The term of office of any director may be terminated at any time, with or without cause, by an affirmative vote of 2/3 of the votes cast by Members entitled to vote and who shall have voted thereon, but in no case shall an officer or director be removed unless 1/3 of the total membership entitled to vote casts votes in favor of the removal.

4.3. Resignations

Any Director may resign at any time, in writing, by notifying the Board of Directors or the President or the Secretary of the Corporation. Such resignation shall take effect at the time therein specified, and, unless otherwise specified, the acceptance of such resignation shall not be necessary to make it effective.

4.4. First Meeting

Each duly elected Board of Directors shall hold its first meeting for the purpose of organization and the transaction of other business, if a quorum be present, without notice of such meeting, on the same day and at the same place as the Annual Meeting next occurring after the election of said Board of Directors or as soon as practicable after such Meeting.

4.5. Regular and Special Meetings

Meetings of the Board of Directors shall be held at such places, within or without the State of Delaware, and times as may be fixed from time to time by resolution of the Board of Directors. The President or the Secretary may call, and upon written request signed by any three directors the Secretary shall call, special meetings of the Board of Directors. Any Meeting of the Board of Directors may be held within or without the State of Delaware, as

designated in the notice or waiver of notice of such meeting.

4.6. Notice of Meetings

Notice of meetings of the Board of Directors shall be in writing, signed by the President or the Secretary, and shall be sent to each director by mail addressed to his last known address, being placed into the mail at least ten days before the time designated for such meeting.

4.7. Waiver of Notice

Any meeting of directors and any action otherwise properly taken thereat shall be valid if notice of the time, place and purposes of such meeting shall be waived in writing before, at or after such meeting by all directors to whom timely notices were not sent as provided in these By-Laws.

4.8. Consent

Any other provisions of these By-Laws to the contrary notwithstanding, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee may be taken without a meeting, if prior to such action a written consent thereto is signed by all members of the Board or of such committee, as the case may be, and such written consent is filed with the minutes of proceedings of the Board of Directors.

4.9. Quorum

Four directors in office, personally present, shall be necessary and sufficient to constitute a quorum for the transaction of business at any meeting of the Board of Directors, but a smaller number may adjourn any such meeting to a later date. Notice of such adjourned meeting shall be given by mail to each director not present at such meeting, the notice being addressed to his last known address and placed into the mail at least ten days before the time designated for such meeting.

4.10. Action by Majority Vote

Except as otherwise expressly required by law or by these By-Laws, the act of 4 or more directors who are a majority of the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors.

4.11. Vote to Fill Vacancies

Any vacancy in the Board of Directors may be filled for the unexpired term, in accordance with section 4.1.4 by a majority vote of the remaining directors, though less than a quorum.

4.12. Submission of Matter to Mail Vote of the Members

The Board of Directors may submit any matter to a mail vote of the Members, when required or deemed advisable or desirable by the Board of Directors. Any such mail vote shall be pursuant to Article 9. The membership vote shall be binding upon the Board of Directors only if at least 1/3 of all members entitled to vote upon the issue shall vote. If less than 1/3 of voting members vote, the issue may be decided by the Board of Directors.

ARTICLE 5 — OFFICERS

5.1. Officers

The officers of the Corporation shall be a President, a Vice President, a Secretary and a Treasurer, each to have such duties or functions as are provided in these By-Laws or as the Board of Directors may from time to time determine. One person may not hold any two or more of the foregoing offices.

5.2. Nomination and Elections

Nominations and elections shall be in accordance with Article 7.

5.3. Term

The term of office of each officer shall begin at the Annual Meeting following his election and end at the Annual Meeting of the next even numbered year. The term of any officer may be terminated at any time, with or without cause, by an affirmative vote of 2/3 of the votes cast by Members entitled to vote and who shall have voted thereon, but in no case shall an officer be removed unless 1/3 of the total membership entitled to vote casts votes in favor of the removal.

5.4. Resignations

Any officer may resign at any time, in writing, by notifying the Board of Directors or the President or the Secretary of the Corporation. Such resignation which automatically includes resignation from the Board of Directors, shall take effect at the time therein specified, and, unless otherwise specified, the acceptance of such resignation shall not be necessary to make it effective.

5.5. Vacancies

A vacancy in any office caused by death, resignation, removal, disqualification or other cause may be filled in accordance with section 4.11 for the unexpired portion of the term by the Board of Directors at any regular or special meeting.

5.6. The President

The President shall be the chief executive officer of the Corporation and shall have general supervision over the affairs of the Corporation, subject, however, to the control of the Board of Directors. He shall, if present, preside at all Annual Meetings, and at all meetings of the Board of Directors. In general, he shall perform all the duties incident to the office of the chief executive officer of a corporation and such other duties as are provided for in these By-Laws and as from time to time may be assigned to him by the Board of Directors.

5.7. The Vice President

At the request of the President, or in his absence, the Vice President shall perform all the duties of the President and in so acting shall have all the powers of and be subject to all the restrictions upon the President. The Vice President shall perform such other duties as may from time to time be assigned to him by the President or by the Board of Directors.

5.8. The Secretary

The Secretary shall act as Secretary of all meetings of the Board of Directors, and of the Members of the Corporation, and shall keep the minutes thereof in the proper book or books to be provided for that purpose; he shall cause all notices required to be given by the Corporation to be duly given and served; he shall have charge of the other books, records

and papers of the Corporation; he shall cause the reports, statements and other documents required by law to be properly kept and filed; he shall see that a current list of Members is maintained; he shall be responsible for processing membership applications; and he shall, in general, perform all the duties incident to the office of Secretary and such other duties as may from time to time be assigned to him by the Board of Directors or by the President.

5.9. The Treasurer

The Treasurer shall collect, and keep account of all moneys received and expended for the use of the Corporation; he shall deposit sums received by the Corporation in the name of the Corporation in such depositories as shall be approved by the Board of Directors.

ARTICLE 6 — COMMITTEES

6.1. Committees

By a majority vote, the Board of Directors may from time to time create or terminate standing and ad hoc committees and may determine the names of such committees and the qualification of the members of such committees; and, to the extent permitted by law, may delegate the powers and duties of the Board of Directors to such other committees, and, to such extent, may otherwise determine such powers and duties. The Board of Directors may elect the members of such committees or may authorize the President and/or any other officer or officers to select the members of any such committee.

ARTICLE 7 — ELECTION OF OFFICERS AND DIRECTORS

7.1. Nominations

No later than nine months preceding the Annual Meeting in every even numbered year, the Board of Directors shall notify Members of the names of Voting Members to serve as a Nominating Committee. Such Committee shall present names of candidates for each Officer and for the Directors to the Members for election. Nominations shall close six months after the date of notification to the members of the composition of the Nominating Committee. Nominations for each Office and Directorship may also be made by any five members. All nominations must bear the signature of at least five Voting Members.

7.2. Elections

Whenever the Officers or Directors are to be elected by the Members, they shall be elected by a plurality of the votes by mail ballot by the members entitled to vote in the election. Within four weeks following the close of nominations, the Secretary shall cause to be compiled and mailed to all Voting Members a ballot which includes a brief summary of the qualifications of each candidate. The balloting shall be conducted in accordance with the provisions of Article 9. The newly elected Officers and Directors will be informed within one week of the results of the election and the date their term begins.

ARTICLE 8 — ANNUAL MEETING

8.1. Date of Meeting

The date of the Annual Meeting shall be established by the Board of Directors. At least one month in advance of the meeting date the Board of Directors will notify the Members of the date and time of the Annual Meeting.

ARTICLE 9 — VOTING

9.1. Mail Voting

All voting by the Members shall be conducted by mail.

9.2. Eligibility

Except as provided by law, every Voting Member of record as of the date of entry of a ballot into the mails shall be entitled to one vote.

9.3. Voting Procedures

On all questions to be submitted to a ballot of the Members, the Secretary shall designate a date for the ballot to be placed in the mails. Each ballot must bear a due date not less than two nor more than four weeks after the date of entry of the ballot into the mails. The ballots will be counted within two weeks following the due date. No ballots received after that time will be counted, regardless of postmark. The results of the vote will be announced immediately to the Board of Directors.

9.4. Authentication of Ballots

The Board of Directors shall establish procedures to authenticate the ballots.

ARTICLE 10 — CONTRACT, CHECKS, DRAFTS, BANK ACCOUNTS, ETC.

10.1. Execution of Contracts

The Board of Directors, except as otherwise provided in these By-Laws, may prospectively or retroactively authorize any officer or officers, agent or agents, in the name and on behalf of the Corporation to enter into any contract or execute and satisfy any instrument, and any such authority may be general or confined to specific instances. Any contract whose dollar value exceeds an amount set by the Board of Directors must be specifically authorized for that value by the Board of Directors.

10.2. Checks, Drafts, etc

All checks, drafts and other orders for payment of money out of the funds of the Corporation, if less than a limit established by the Board of Directors, shall be signed on behalf of the Corporation by any one officer, normally the Treasurer. For amounts equal to or greater than the established limit, said instruments shall be signed by two Officers.

10.3. Deposits

The funds of the Corporation not otherwise employed shall be deposited from time to time to the order of the Corporation in such banks, trust companies or other depositories as the Board of Directors may select.

ARTICLE 11 — BOOKS AND RECORDS

11.1. Books and Records

There shall be kept at a place to be designated by the Treasurer correct books of account of all the business and transactions of the Corporation. If the books and records are to be kept at a place other than the principal place of employment of the Treasurer, Treasurer shall notify the President and Secretary in writing of the location of said books and records.

ARTICLE 12 — SEAL

12.1. Seal

The Board of Directors shall provide a corporate seal which shall be in the form of a circle and shall bear the full name of the Corporation and the year of its incorporation.

ARTICLE 13 — AMENDMENTS OF BY-LAWS

13.1. Amendments by Members

These By-Laws, or any one or more of the provisions thereof, may be amended by changing, altering, suspending, supplementing or repealing the same, by an affirmative vote of 2/3 of the votes cast by Members entitled to vote and who shall have voted, but only in accordance with a proposed amendment duly published and mailed to Voting Members at least thirty days prior to the date of entry of the ballot into the mails. In no case shall an amendment by members be carried by a vote of less than 1/3 of total membership entitled to vote. Conduct of voting shall be in accord with Article 9.

13.2. Amendments by Directors

These By-Laws or any one or more of the provisions thereof may, except for this article, also be amended by changing, altering, suspending, supplementing or repealing the same; by the Board of Directors at any duly constituted regular or special meeting of the Board of Directors. Such an amendment shall require an affirmative vote by at least two-thirds of the entire Board of Directors. Any amendment of these By-Laws by the Board of Directors shall at all times be subject to rescission by the Members. The Board of Directors shall not have any power to readopt any amendment which may have been rescinded by the Members. When the Board of Directors proposes a change to the By-Laws, written notice of the proposed change, including the vote, the proposed change, and pertinent reasons for the change must be distributed by the Secretary to the Members by first-class mail. Negative responses to the proposed change from the Members shall be directed to the Secretary. Thirty calendar days after the mailing the Secretary will tabulate the responses from Members, and the amendment will take effect if fewer than 25 percent of the Members, of mailing record date, have objected. If 25 percent or more object, the amendment shall not take effect until the members have voted on rescinding the by-law. The vote to rescind shall be in accordance with section 13.1.

ARTICLE 14 — COMPENSATION OF OFFICERS AND DIRECTORS

14.1. Compensation of Officers and Directors

No part of the income of the Corporation shall inure to the benefit of any Member, Director, or Officer of the Corporation, or any private individual (except that reasonable compensation may be paid for services rendered to or for the Corporation affecting one or more of its purposes), and no Member, Director, of Officer of the Corporation or any private individual shall be entitled to share in the distribution of any of the assets on dissolution of the Corporation.

USENIX Association
P.O. Box 7
El Cerrito, CA 94530

First Class Mail

4.2BSD Now Available
Washington D.C. Meeting
USENIX 83.2 Software Tape
Proposed Bylaws Changes